

# WARRIOR SPI Linear LED Heavy Industrial Linear Luminaire



Intelligent Emergency  
Variants



## Modular Design

Key components such as the LED and PSU modules are easily accessible for straightforward maintenance and inspection.



## Intelligent Emergency

Self-testing emergency battery providing up to 3 hours emergency back-up.



## Retrofitable

Linear has been designed with the same dimensions, fixing centres and cable entries as traditional fluorescent fittings making it a direct replacement.



## Bespoke LED

Raytec are specialists in LEDs and all our products are designed around LEDs with bespoke housing for optimum performance and reliability.

## 5 YEAR WARRANTY

All Raytec luminaires are provided with an industry leading 5 year warranty and have an expected useful life in excess of 10 years. See Warranty Statement for details.



# Technical Specifications - Core Products

## WARRIOR Linear WL84



## WARRIOR Linear WL168



| Electrical    | WL84  | WL84 Emergency   | WL168  | WL168 Emergency  |
|---------------|---|------------------|--|------------------|
| Input         | Standard: 110-254V AC<br>Low voltage version: 18-48V AC<br>and 18-69V DC<br>Extra low voltage version: 12V AC/DC                                  | 110-254V AC only | Standard: 110-254V AC<br>Low voltage version: 18-48V AC<br>and 18-69V DC<br>Extra low voltage version: 12V AC/DC | 110-254V AC only |
| Power         | 24W   | 32W              | 49W  | 56W              |
| Termination   | Incoming terminal block suitable for looping 4 core 4mm <sup>2</sup> cable (6mm <sup>2</sup> available - POA)                                     |                  |  |                  |
| Power Factor  | >0.95   | >0.95            | >0.95  | >0.95            |
| Cable Entries | 2xM20 cable entries at both ends, through wired as standard (other entries available upon request), dispatched complete with three blanking plugs |                  |  |                  |

| Optical               | WL84                    | WL84 Emergency          | WL168                   | WL168 Emergency         |
|-----------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Lumen output on mains | 3524                    | 3524                    | 7048                    | 7048                    |
| LED type              | Platinum Elite SMT LEDs | Platinum Elite SMT LEDs | Platinum Elite SMT LEDs | Platinum Elite SMT LEDs |
| Number of LEDs        | 80                      | 80                      | 160                     | 160                     |
| CRI                   | 80+                     | 80+                     | 80+                     | 80+                     |
| Colour Temperature    | 6500K standard          | 6500K standard          | 6500K standard          | 6500K standard          |

| Mechanical        | WL84           | WL84 Emergency | WL168          | WL168 Emergency |
|-------------------|----------------|----------------|----------------|-----------------|
| Burning Position  | Universal      | Universal      | Universal      | Universal       |
| IP Rating         | IP66 & IP67    | IP66 & IP67    | IP66 & IP67    | IP66 & IP67     |
| IK Rating         | IK10           | IK10           | IK10           | IK10            |
| Temperature Range | -40°C to +60°C | -20°C to +50°C | -40°C to +60°C | -20°C to +50°C  |
| Weight            | 6kg (13.2lbs)  | 7kg (15.4lbs)  | 9kg (19.8lbs)  | 10kg (22lbs)    |

| Mechanical                | WL84  | WL84 Emergency  | WL168             | WL168 Emergency   |
|---------------------------|---|---|-------------------|---|
| Enclosure                 | Marine grade aluminium epoxy powder coated, UV stabilised polycarbonate, all external fasteners and brackets are marine grade stainless steel |   |                   |   |
| Unit Colour               | Silver (RAL 9006)   | Silver (RAL 9006)<br>Red (RAL3024) - Emergency<br>battery cover | Silver (RAL 9006) | Silver (RAL 9006)<br>Red (RAL3024) - Emergency<br>battery cover |
| Installation instructions | Please contact Raytec for a copy  |   |                   |   |
| Battery Care              | Please see document 0010-D-00001 at <a href="http://www.raytecltd.com">www.raytecltd.com</a>  |   |                   |   |
| Dimensions                | See dimensional sketches  |   |                   |   |
| Mounting                  | Via M8/M6 tapped holes. Various mounting arrangements available (please see product overview guide)   |   |                   |   |

# Technical Specifications - Core Products

| Intelligent<br>Emergency   | WL84 Emergency                     | WL168 Emergency                    |
|----------------------------|------------------------------------|------------------------------------|
| Function                   | Self-testing intelligent emergency | Self-testing intelligent emergency |
| System health<br>indicator | Tri-colour LED indicator           | Tri-colour LED indicator           |
| Emergency<br>Duration      | Up to 3hrs @ 25% power             | Up to 3hrs @ 25% power             |
| Emergency<br>Battery       | NiCd 12V                           | NiCd 12V                           |
| Emergency<br>Charge Time   | 20 hours                           | 20 hours                           |

# Technical Specifications - WARRIOR Linear Essential

## WARRIOR Linear WL84-LL



## WARRIOR Linear WL168-LL



### Electrical

#### WL84-LL

#### WL168-LL

|               |   |             |
|---------------|---|-------------|
| Input         | Standard: 110-254V AC<br>Low voltage version: 18-48V AC and 18-69V DC<br>Extra low voltage version: 12V AC/DC   | 110-254V AC |
| Power         | 24W   | 49W         |
| Termination   | Incoming terminal block suitable for looping 4 core 4mm <sup>2</sup> cable (6mm <sup>2</sup> available - POA)   |             |
| Power Factor  | >0.95   |             |
| Cable Entries | 2xM20 cable entries at one end. Loop in loop out as standard (other entries available upon request), dispatched complete with one approved blanking plugs |             |

### Optical

#### WL84-LL

#### WL168-LL

|                       |                         |                         |
|-----------------------|-------------------------|-------------------------|
| Lumen output on mains | 3524                    | 7048                    |
| LED type              | Platinum Elite SMT LEDs | Platinum Elite SMT LEDs |
| Number of LEDs        | 80                      | 160                     |
| CRI                   | 80+                     | 80+                     |
| Colour Temperature    | 6500K standard          | 6500K standard          |

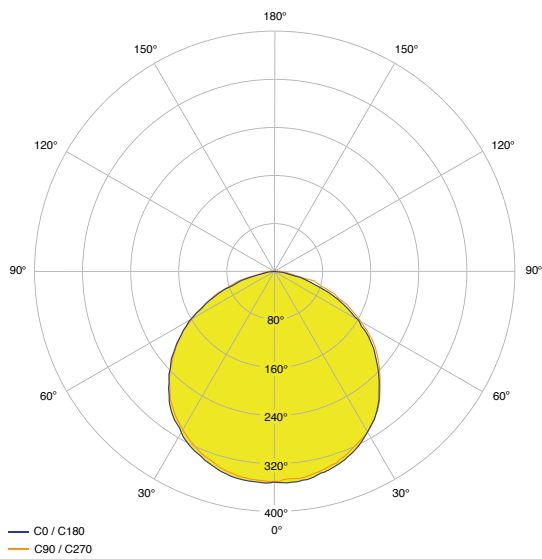
### Mechanical

#### WL84-LL

#### WL168-LL

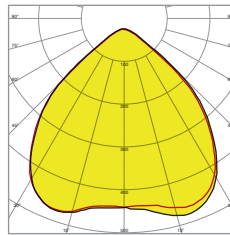
|                           |   |                   |
|---------------------------|---|-------------------|
| Burning Position          | Universal   | Universal         |
| IP Rating                 | IP66 & IP67   | IP66 & IP67       |
| IK Rating                 | IK10  | IK10              |
| Temperature Range         | -40°C to +60°C  | -40°C to +60°C    |
| Weight                    | 6kg (13.2lbs)   | 9kg (19.8lbs)     |
| Enclosure                 | Marine grade aluminium epoxy powder coated, UV stabilised polycarbonate, all external fasteners and brackets are marine grade stainless steel |                   |
| Unit Colour               | Silver (RAL 9006)   | Silver (RAL 9006) |
| Installation instructions | Please contact Raytec for a copy  |                   |
| Dimensions                | See dimensional sketches  |                   |
| Mounting                  | Via M8/M6 tapped holes. Various mounting arrangements available (please see product overview guide)   |                   |

## Light Distribution

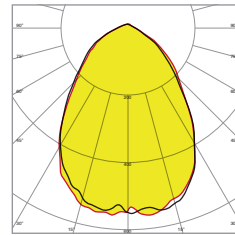


Zone 2 - Standard

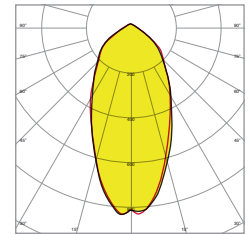
### Symmetrical Optics



90x90

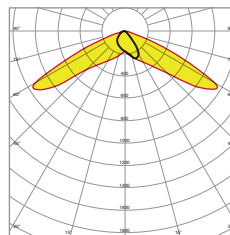


60x60

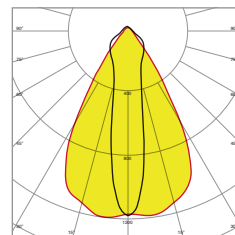


30x30

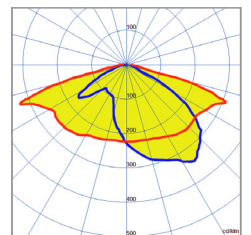
### Asymmetrical Optics



Safety Shower -  
Wide Beam



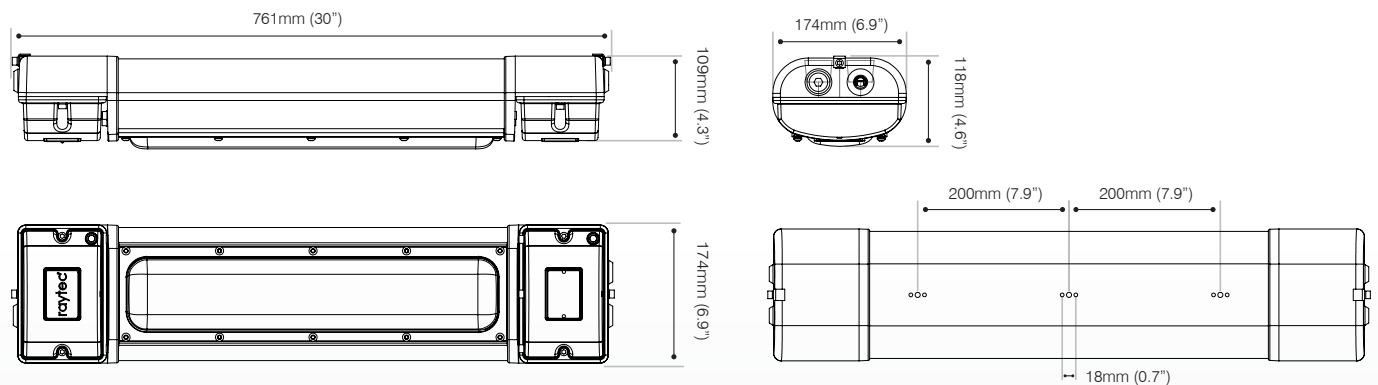
Aisle -  
80x30



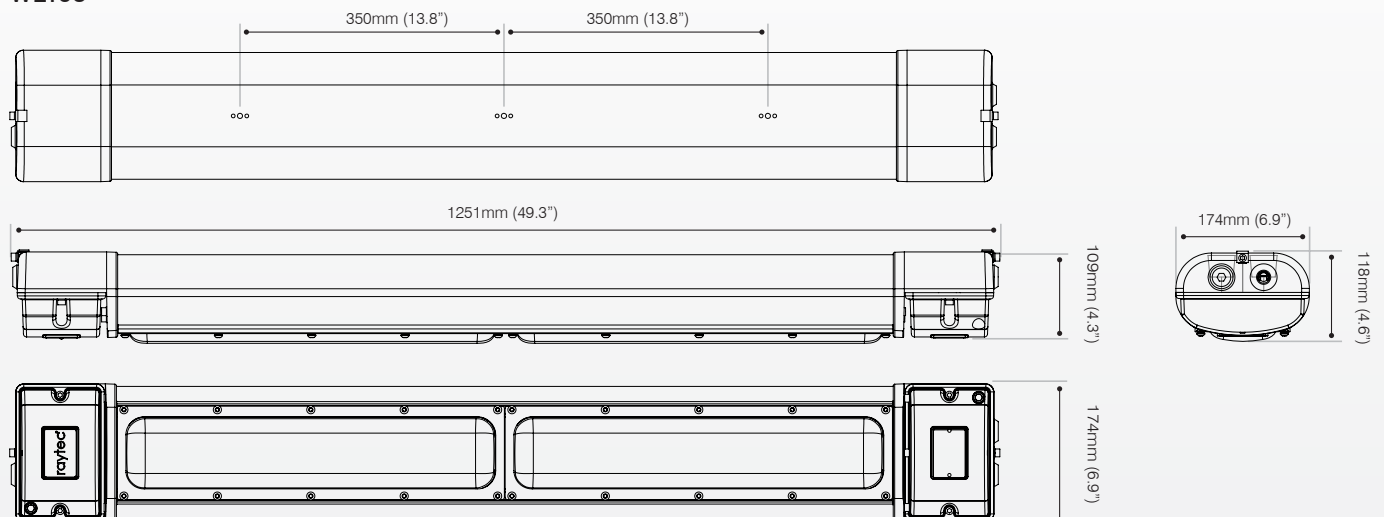
PP3  
Optic

## Product Dimensions

### WL84, WL84 Emergency

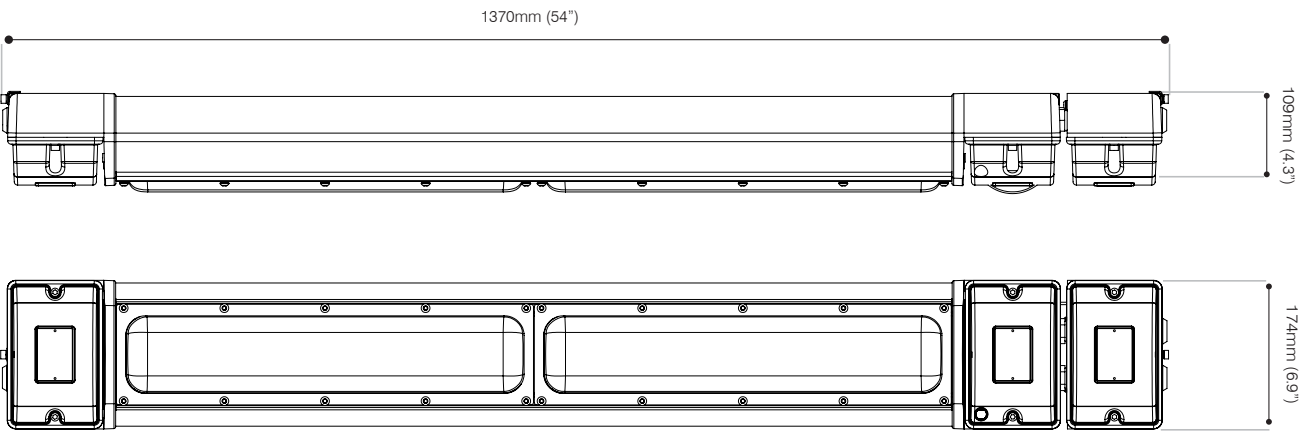


### WL168

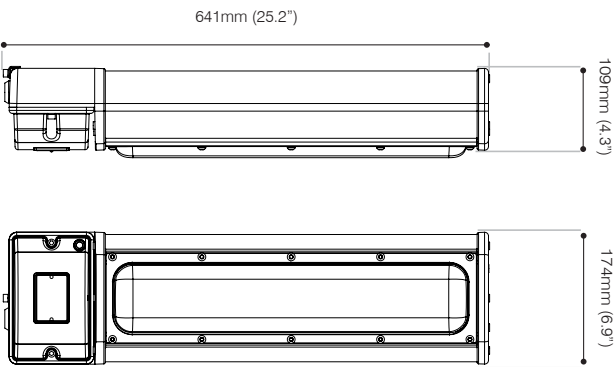


# Product Dimensions

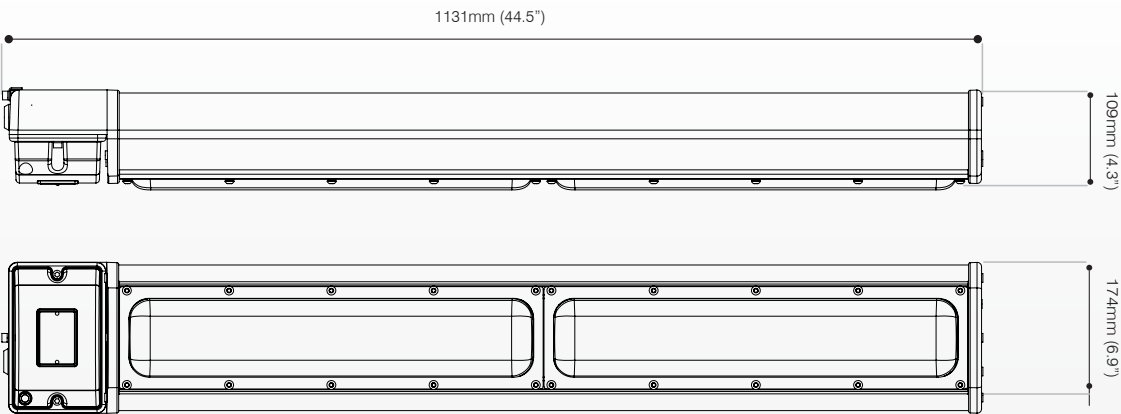
## WL168 Emergency



## WL84 Essential



## WL168 Essential

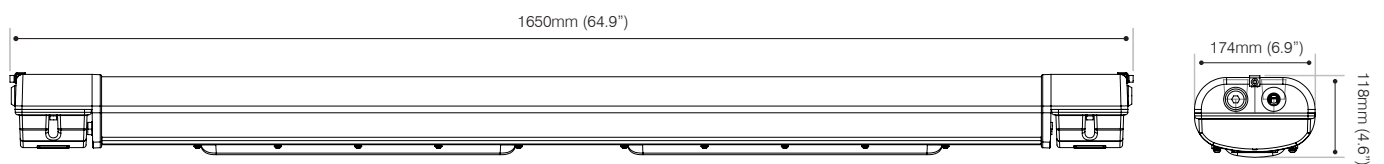


## Product Dimensions

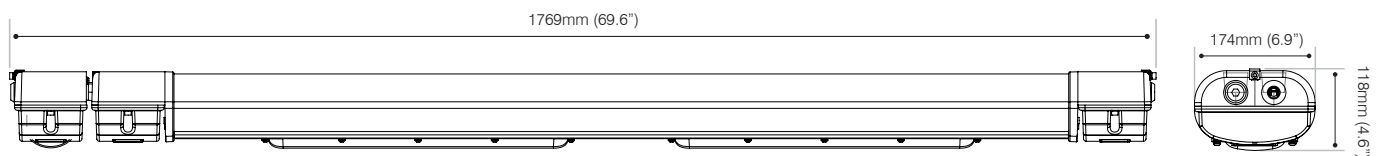
### WL84 - 1200, WL84 - 1200 Emergency



### WL168 - 1500



### WL168 -1500 Emergency



### WARRIOR Linear Models with 200mm mounting points:

WL84 / WL84 Emergency / WL84 Essential

### WARRIOR Linear Models with 350mm mounting points:

WL168 / WL168 Emergency / WL168 Essential / WL84-1200 /  
WL84-1200 Emergency / WL168-1500 / WL168-1500 Emergency

## Part Code Builder

### WARRIOR Linear Family

#### Standard: Example - SPI-WL84-EMX25

| Family | Model      | Emergency               | CCT                | Power                                 | Optics   | Entry            |
|--------|------------|-------------------------|--------------------|---------------------------------------|--|------------------|
| SPI    | WL84       | NOT STATED - Non EM     | Not Stated - 6500K | Not Stated - 110-254Vac               | Not Stated - Standard                          | Not Stated - M20 |
|        | WL168      | EMX25 (25% for 3 hours) | 4K - 4000K         | LV - Low Voltage (Non EM only)        | Other optics available - please contact Raytec | M25              |
|        | WL84-1200  |                         |                    | ELV - Extra Low Voltage (Non EM only) |  |                  |
|        | WL168-1500 |                         |                    |                                       |  |                  |

#### Essential: Example - SPI-WL84-LL

| Family | Model    | CCT                | Power                               | Optics   | Entry            |
|--------|----------|--------------------|-------------------------------------|--|------------------|
| SPI    | WL84-LL  | Not Stated - 6500K | Not Stated - 110-254Vac             | Not Stated - Standard                          | Not Stated - M20 |
|        | WL168-LL | 4K - 4000K         | LV - Low Voltage (WL84 only)        | Other optics available - please contact Raytec | M25              |
|        |          |                    | ELV - Extra Low Voltage (WL84 only) |  |                  |

## WARRIOR Linear Specials



### Safety Shower Variants

- Green LED technology designed for use where safety shower units are located.
- Dominant wavelength: 519nm
- Dedicated safety shower optic for maximum visibility

Example ordering code: SPX-WL168-G

Other options available, contact Raytec for full ordering information.



### Wildlife-Friendly Variants

- Amber LED technology designed to protect wildlife in coastal locations or nature reserves.
- Dominant wavelength: 600nm

Example ordering code: SPX-WL168-4K-A

Other options available, contact Raytec for full ordering information



See WARRIOR Linear Mounting & Accessories Guide for full range of accessories